

Profile Grinding on Prismatic Broach

A14-300

The Schneeberger grinder used for this application is a CORVUS bpp. The relief grinding of flat broaches is usually a time-consuming operation which heavily loaded the tool grinder. By second quick vertical linear motor driven axis results in two advantages for this operation. The low moving mass allows on one hand reduce the cycle time and on the other hand bearings and guides are protected. The process is realized here by means of a broach with fir tree profile.



1. Cycletime for profile grinding

Workpiece:	Länge 250 mm, Profilgeometrie 10x		
Material HSS			
Operations	Probe	Prf rough	Prf fin
Feed [mm/Min]	200	60	60
Power [kW]		3	3
Cutting feed [m/s]		27	27
Used wheels		1	1
Grinding time [s]	40	1150	1150
Total cycle time	39 Min		

The cycle times are indicative. Material to be ground, grinding wheels, coolants can influence the cycle times considerably.

2. Used Grinding Wheels

1	Ø60 B40
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3. Machine and Software Requirements

Machines: 6 axes CNC grinders : CORVUS bpp

Control: Fanuc 31i

Accessories:

Responsible engineer: STR / 11.2011

www.schneeberger.ch

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Coolant: Synthetic Oil, pressure 6 bar

Software: Quinto 5

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